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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,559	09/15/2003	Do-Young Choi	45664	9037

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09/30/2005

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EXAMINER

RENNER, CRAIG A

ART UNIT

PAPER NUMBER

2652

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,559

Applicant(s)

CHOI ET AL.

Examiner

Craig A. Renner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 10-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) 4-6 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>19 May 2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of "group I which includes claims 1 through 9" in the reply filed on 11 August 2005 is acknowledged. The traversal is on the ground(s) that "the subject matter of the claims is related such that examination of the entire application can be made without serious burden." This argument, however, is not found to be persuasive because the search for the invention of group I is not coextensive with the search for the inventions of the remaining groups as evidenced by their different classifications, detailed in paragraph 1 of the Office action filed 13 July 2005. Therefore, searching for the inventions of all groups could not be done without serious burden.

The requirement is still deemed proper and is therefore made FINAL. Accordingly, claims 10-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to one or more non-elected inventions/species, there being no allowable generic or linking claim.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Oath/Declaration

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because the clause regarding "willful false statements ..." required by 37 CFR 1.68 has been omitted.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "wherein at least one of the loading gears is integrally formed with a hook so that the at least one loading gear is directly joined to the guide rail" as set forth in claim 3 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

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renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
6. The abstract of the disclosure is objected to because it is not "within the range of 50 to 150 words." Appropriate correction is required. See MPEP § 608.01(b).
7. The disclosure is objected to because of the following informalities:
 - a. In line 23 on page 10, "fist" should be spelled --first--.
 - b. In line 10 on page 11, "first link member 361; 367" should be changed to --first link member 361; 371-- in order to be consistent with the remainder of the disclosure.
 - c. In lines 3, 4, 12 and 15 of claim 1 and line 4 of claim 2, each instance of "main deckmain deck" should be corrected to read --main deck--.
 - d. In line 8 of claim 7, "gear valleys,." should be corrected to read --gear valleys.--

e. In line 7 of claim 9, "the gear teeth" should be changed to -- the remaining gear teeth-- in order to differentiate these teeth from the "large gear teeth" set forth in line 6 of claim 9.

Appropriate correction is required.

8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In line 2 of claim 7, "the neighboring gear valleys" are indefinite because they lack clear and/or positive antecedent basis.

b. Claim 8 inherits the indefiniteness associated with base claim 7 and stands rejected as well.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al. (US 5,699,208).

Kim teaches a deck mechanism comprising a main deck (1) provided with a head drum (6) and a capstan motor (24); a sub-deck (2) installed on the main deck to be loaded/unloaded, the sub-deck being provided with a pair of reel discs (20 and 20'), onto which tape reels of a tape cassette (100) are seated, respectively; a pole base loading unit (includes 43 and 44, for instance) for taking out and guiding a tape to be in contact with a side of the head drum when the sub-deck is loaded; a pinch roller unit (includes 73, for instance) for compressing the tape against a spindle (15) of the capstan motor when the sub-deck is loaded; a brake unit (includes 54, for instance) for selectively braking one (20', for instance) of the reel discs; a main sliding member (7) mounted on the main deck to be capable of reciprocatingly sliding, the main sliding member controlling the driving of the pinch roller unit; and a main cam gear (4) mounted on the main deck to be capable of rotating, the main cam gear allowing all of the sub-

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deck, the pole base loading unit, the brake unit, and the main sliding member to perform linked movements while the main cam gear is rotationally driven.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 5,699,208) in view of Saito et al. (US 6,215,612).

Kim teaches the deck mechanism as detailed in paragraph 12, supra, further wherein the pole base loading unit comprises a pair of pole base assemblies (includes 17 and 18, for instance) mounted to be capable of reciprocating on the main deck, the pole base assemblies moving the tape as being loaded to come into contact with the head drum; a guide rail (includes 22a and/or 23a, for instance) provided on the main deck, for guiding the movement of the pole base assemblies. Kim, however, remains

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silent as to the pole base loading unit further comprising “a pair of loading gears mounted on the guide rail to be capable of being rotated, the loading gears being engaged with each other and connected to the main cam gear; and a pair of link units for linking the loading gears to the pole base assemblies, respectively” as per claims 2-3, and “wherein at least one of the loading gears is integrally formed with a hook so that the at least one loading gear is directly joined to the guide rail” as per claim 3.

Saito teaches that a pair of loading gears (79 and 84) mounted on a guide rail (42) to be capable of being rotated such that the loading gears are engaged with each other and connected to a main cam gear (66), and a pair of link units (81 and 86, for instance) for linking the loading gears to pole base assemblies (includes 39 and 40, for instance), respectively, is a notoriously old and well known pole base loading unit configuration to that taught by Kim for accomplishing the same function of driving pole base assemblies. Official notice is taken of the fact that a gear integrally formed with a hook is a notoriously old and well known gear attachment configuration. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have had the pole base loading unit of Kim further comprise a pair of loading gears mounted on the guide rail to be capable of being rotated, the loading gears being engaged with each other and connected to the main cam gear; and a pair of link units for linking the loading gears to the pole base assemblies, respectively, as taught by Saito, and to have had at least one of the loading gears be integrally formed with a hook so that the at least one loading gear is directly joined to the guide rail. The rationale is as follows:

One of ordinary skill in the art would have been motivated to have had the pole base loading unit of Kim further comprise a pair of loading gears mounted on the guide rail to be capable of being rotated, the loading gears being engaged with each other and connected to the main cam gear; and a pair of link units for linking the loading gears to the pole base assemblies, respectively, as taught by Saito since such is a notoriously old and well known pole base loading unit configuration to that taught by Kim for accomplishing the same function of driving pole base assemblies, and since selecting a notoriously old and well known pole base loading unit configuration on the basis of its suitability for the intended use is considered to be within the level of ordinary skill in the art.

One of ordinary skill in the art would have been motivated to have had at least one of the loading gears be integrally formed with a hook so that the at least one loading gear is directly joined to the guide rail since such is a notoriously old and well known gear attachment configuration, and since selecting a notoriously old and well known gear attachment configuration on the basis of its suitability for the intended use is considered to be within the level of ordinary skill in the art.

Pertinent Prior Art

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. This includes Do et al. (US 5,485,324), which teaches a deck mechanism with deck mechanism components performing linked movements while a main cam gear thereof is rotationally driven.

Allowable Subject Matter

17. Claims 4-6 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 7-8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (571) 272-7580. The examiner can normally be reached on Tuesday-Friday 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Craig A. Renner
Primary Examiner
Art Unit 2652

CAR